

FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST 6220
FACILITY NAME: SIERRA PACIFIC INDUSTRIES
November 2008

SUMMARY

PURPOSE of this Fact Sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for Sierra Pacific Industries (SPI) that will allow the discharge of wastewater to the city of Centralia's wastewater treatment plant.

State law requires any industrial facility to obtain a permit before discharging waste or chemicals to waters of the state. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into waters of the state.

A State Waste Discharge permit limits the types and amounts of pollution the facility may discharge. Ecology bases those limits either on (1) the pollution control or wastewater treatment technology available to the industry, or on (2) the effects of the pollutants to the Publicly Owned Treatment Works (POTW) (local limits).

PUBLIC ROLE in the Permit

Ecology makes the draft permit and fact sheet available for public review and comment at least 30 days before we issue the final permit to the facility operator. Copies of the fact sheet and draft permit for SPI, State Waste Discharge permit ST 6220, are available for public review and comment from January 5, 2009, until the close of business February 3, 2009. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement**.

Before Ecology published the draft State Waste Discharge permit, SPI, reviewed it for factual accuracy. Ecology corrected any errors or omissions about the facility's location, product type or production rate, discharges or receiving water, or its history.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this Fact Sheet as **Appendix C - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. The rest of the fact sheet will not be revised, but the full document will become part of the legal history contained in the facility's permit file.

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I. INTRODUCTION

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State Waste Discharge Program (Chapter 173-216 Washington Administrative Code [WAC])
- Submission of Plans and Reports for Construction of Wastewater Facilities (Chapter 173-240 WAC)

These rules require any industrial facility operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

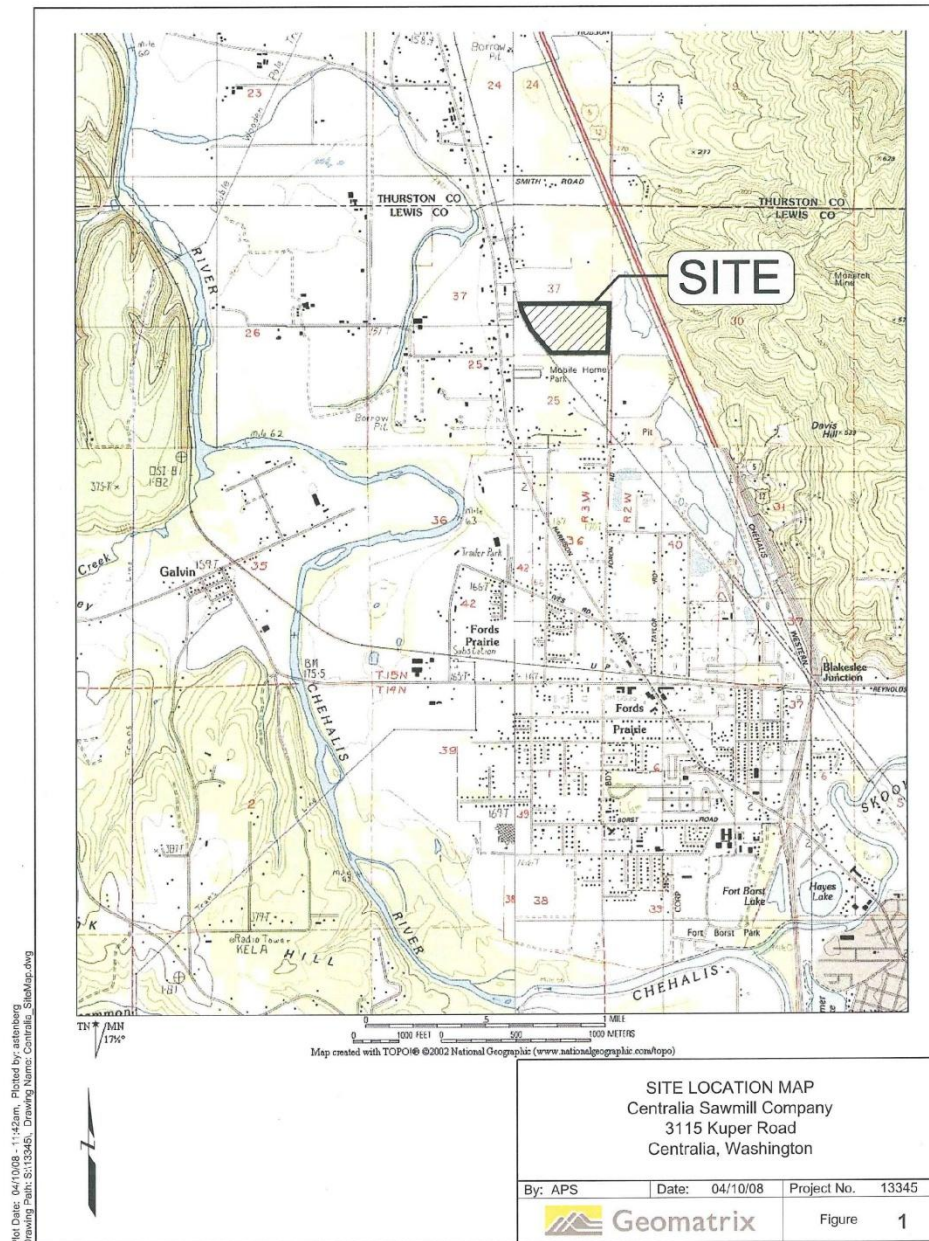
Under the State Waste Discharge permit program and in response to a complete and accepted permit application Ecology must prepare a draft permit and accompanying fact sheet, and make it available for public review before final issuance. Ecology must also publish an announcement (public notice) telling people where they can read the draft permit, and where to send their comments, during a period of 30 days. (See **Appendix A--Public Involvement** for more detail about the Public Notice and Comment procedures). After the Public Comment Period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment. Ecology will summarize the responses to comments and any changes to the permit in **Appendix C**.

Table 1 - General Facility Information

Applicant:	Sierra Pacific Industries -Centralia Lumber Manufacturing Facility
Facility Name and Address:	Sierra Pacific Industries Centralia Lumber Manufacturing Facility, 3115 Kuper Road, Centralia ,WA 98531
Type of Facility:	Lumber Manufacturing Facility
SIC Code	2421
Discharge Location:	Latitude: 46° 45' 20.77" N Longitude: 122° 59' 39.40" W
Treatment Plant Receiving Discharge	City of Centralia
Contact at Facility	Name: Scott North, Division Manager Telephone No.: 360-736-5417
Responsible Official	Name: Scott North Title: Division Manager Address: 3115 Kuper Road Centralia, Washington 98531 Telephone No.: 360-736-5417 FAX No.: 360-623-1141

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Figure 1 Facility Location Map



II. BACKGROUND INFORMATION

A. Facility Description

History

SPI Centralia lumber manufacturing facility includes: a sawmill, planer-mill, and a boiler/kiln complex. It is located northwest of downtown Centralia in the Port of Centralia Industrial Park. SPI started this operation in 2006 after purchasing a small existing sawmill at the facility in 2003. Currently, SPI is reusing their boiler blowdown and the reverse osmosis (RO) concentrate wastewater for the dust control. SPI indicates that this practice is appropriate during the dry season. But during the wet season this practice is inefficient. SPI plans to change this practice by discharging their wastewater to the City of Centralia's wastewater treatment plant. The business is classified under Standard Industrial Classification (SIC) 2421. This industrial classification falls under Code of Federal Regulation (CFR) 429-K.

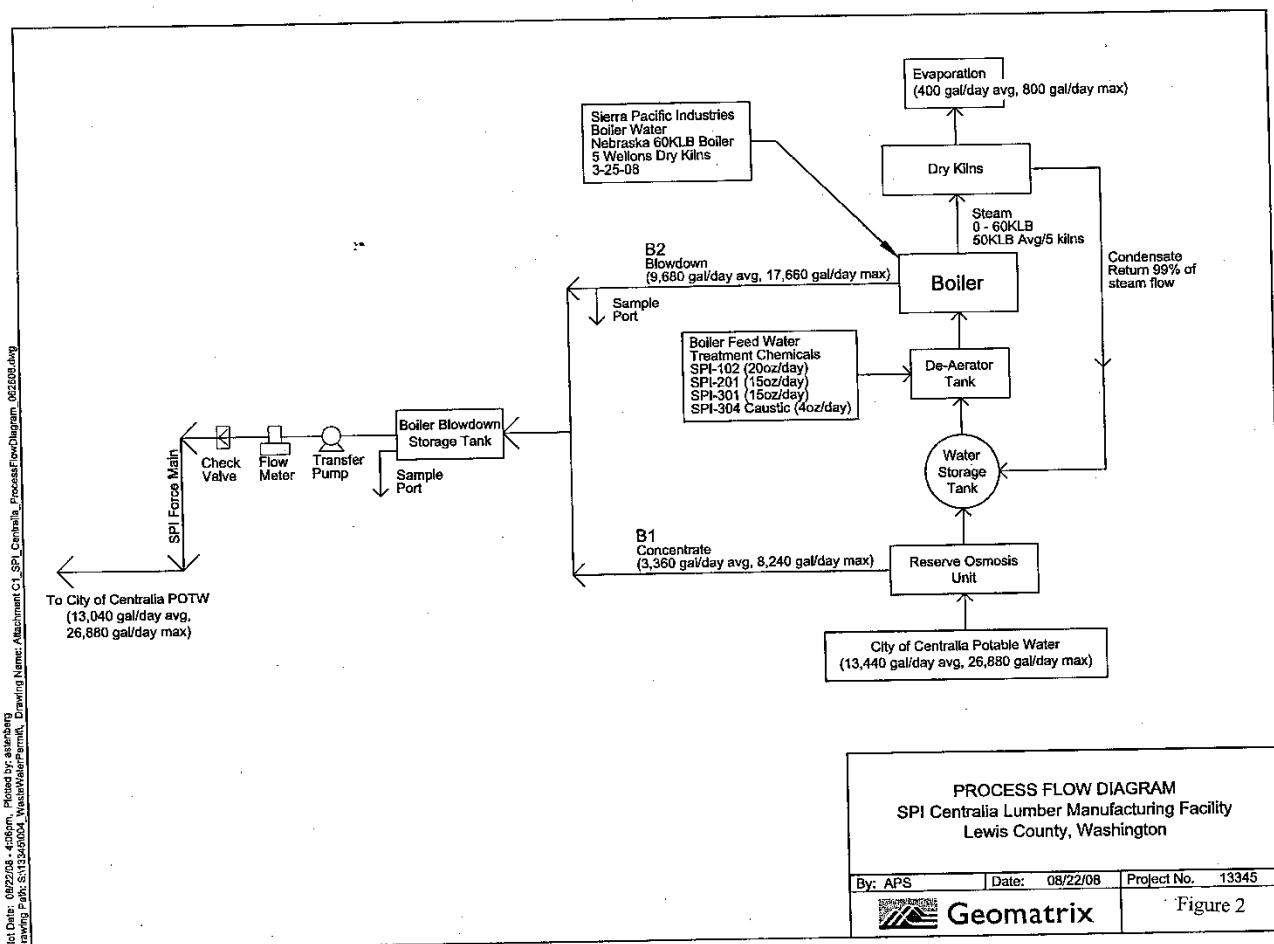
Industrial Process

SPI stores unseasoned "green" logs at the facility and then transfers the logs to the sawmill for manufacturing into "rough" lumber by means of multiple saw lines and log/lumber handling transfers. The rough lumber is stored, taken to the dry kilns for drying, or taken directly to the planer-mill for finishing into the final product, stud size lumber. The facility inventories finished product which it then ships off site by both rail and trucks. Activities and equipment at this site include the following: log loading machines, forklifts, shipping trucks, log trucks, residual product trucks (chips and barks), and employee traffic.

Wastewater Pretreatment

SPI treats city of Centralia potable water with RO before supplying it to the boiler to provide up to 60,000 pounds (lbs) of steam per hour to kilns. The facility produces two streams of industrial wastewater: the RO concentrate (Stream B1) and the boiler blowdown (Stream B2), as shown on the process flow diagram in Figure 2. The process flow diagram gives anticipated average and maximum values for flows in these streams of wastewater.

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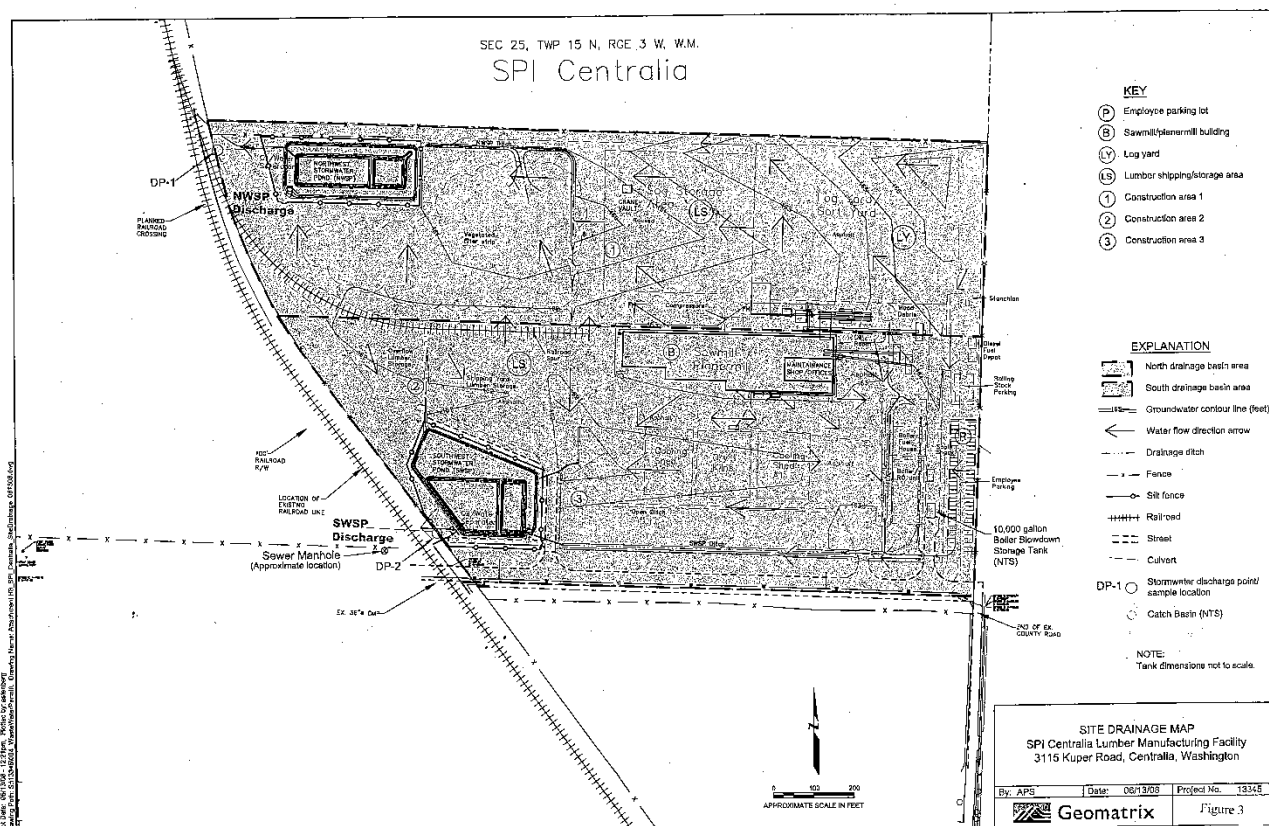
The permeate stream leaving the RO unit continues on to a storage tank. SPI adds and mixes boiler water treatment chemicals in this tank before use in the boiler. These chemicals prevent corrosion and scaling of the piping. The boiler produces steam at a pressure of 225 pounds per square inches (psi). The steam is then sent in a closed loop system to heat the kilns. Some negligible amount of steam is vented to the atmosphere from vents along the heating system and during kiln conditioning. SPI pipes condensate returning from the kilns to the water storage tank for reuse. Once concentrations of impurities build up in the boiler, the facility must discharge boiler water to prevent clogging inside the boiler and steam piping. Currently, SPI collects boiler blow-down water and RO concentrate in the boiler waste tank, which has a sampling port (Figure 2). The pH of the combined wastewater measured at 6.82 on June 4, 2008.

SPI states in its application that it has no potential source for oil and grease to enter either waste stream B1 or B2. There are no floor drains located in the vicinity of any oil containers on the facility premises. Employees clean up all oil spills by absorption using spill kits or sawdust, as specified in the site Spill Prevention Control and Countermeasure Plan.

Industrial Stormwater General Permit

SPI states that on May 13, 2008, it submitted an application to Ecology for coverage under the Industrial Stormwater General Permit. Figure 3 shows the site drainage map that SPI submitted to Ecology. This figure illustrates that the applicant has two stormwater detention ponds and also two oil water separators.

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B. Permit Status

SPI is a new facility that submitted an application for an industrial permit on July 23, 2008. On August 13, 2008, Ecology sent a letter to SPI asking them to submit additional information to complete their permit application. On August 28, 2008, Ecology received the supplemental material to complete the permit application. Ecology accepted it as complete on September 19, 2008.

C. Wastewater Characterization

SPI reported the concentration of pollutants in the State Waste Discharge permit application. The wastewater is characterized as follows:

Table 2: Wastewater Characterization

RO concentrate (Stream B1) and Boiler Blowdown (Stream B2)

Parameter	RO-01/25/08 Sample	Estimated RO Concentrate Water Quality
pH (Standard Units)	7.75	6.0-9.0
Alkalinity (mg/L)	55.5	100.91
Total Dissolved Solids (mg/L)	141	256.36
Calcium (mg/L)	17	30.91
Iron (mg/L)	<0.05	<0.09
Magnesium (mg/L)	5.11	9.29
Manganese (mg/L)	<0.001	<0.002

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Parameter	04/10/08 - Boiler Blowdown Sample	04/22/08 - Boiler Blowdown Sample
Calcium (mg/L)	<0.1	0.23
Magnesium (mg/L)	0.085	0.20
Total Suspended Solids (mg/L)	<4	<2.1
Total Dissolved Solids (mg/L)	146	137
Total Phosphorous (mg/L)	5.43	5.32
Calculated Hardness (mg- CaCO ₃ /L)	2.0	1.4

D. SEPA Compliance

To meet the intent of State Environmental Policy Act (SEPA), an existing, unpermitted discharge must undergo SEPA review during the permitting process. The facility filed a SEPA checklist with the Port of Centralia on August 12, 2003, and the Port of Centralia issued a determination of non-significance for the project on August 20, 2003.

III. PROPOSED PERMIT CONDITIONS

State regulations require that Ecology base permit discharge limits on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation, or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants to the POTW (local limits). Wastewater must not interfere with the operation of the POTW.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the State of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants that were not reported in the permit application but that may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Industries may be in violation of their permit until the permit is modified to reflect additional discharge of pollutants.

A. Technology-Based Effluent Limits

All waste discharge permits issued by Ecology must specify conditions requiring available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW

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90.48). Any new source that introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR Part 403. These are the general and specific prohibitions listed in Section S5 in the permit.

B. Effluent Limits Based On Local Limits

To protect the City of Centralia's wastewater treatment plant from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, Ecology believes it is necessary to impose limits for certain parameters. Ecology based these limits based on local limits it developed for the city of Centralia. Applicable effluent limits for this discharge include the following:

Table 4: Limits Based on Local Limits

EFFLUENT LIMITS		
Parameter	Average Monthly	Maximum Daily
Flow (GPD) ¹	13,040	26,880
BOD ₅ ³ (mg/L) ²	-	300
TSS ⁴ (mg/L)	-	300
Oil and Grease (mg/L)	-	100
pH (Standard Units)	-	6.0 – 9.0
Temperature (°C)	-	Report
¹ GPD= Gallons Per Day		
² mg/L = milligrams per liter		
³ BOD ₅ = 5- day Biochemical Oxygen Demand		
⁴ TSS = Total Suspended Solids		

IV. MONITORING REQUIREMENTS

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

Ecology details the proposed monitoring schedule under Condition S2 and S3. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

A. Lab Accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories* to prepare all monitoring data (with the exception of certain parameters).

V. OTHER PERMIT CONDITIONS

A. Reporting and Recordkeeping

Ecology based permit condition S3 on our authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and CFR 403.12 (e),(g), and (h)).

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B. Operations and Maintenance

Ecology requires industries to take all reasonable steps to properly operate and maintain their wastewater treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110). The facility must prepare and submit an operation and maintenance manual as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). Implementation of the procedures in the Operation and Maintenance Manual ensures the facility's compliance with the terms and limits in the permit.

C. Prohibited Discharges

Ecology prohibits certain pollutants from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

D. Dilution Prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Non Routine and Unanticipated Discharges

Occasionally, this facility may generate wastewater not characterized in the permit application because it is not a routine discharge and the facility did not anticipate it at the time of application. These wastes typically consist of waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

The permit authorizes non-routine and unanticipated discharges under certain conditions. The facility must characterize these waste waters for pollutants and examine the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and on any opportunities for reuse, Ecology may:

- Authorize the facility to discharge the water.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

F. Spill Plan

This facility stores a quantity of chemicals on-site that have the potential to cause water pollution if accidentally released. Ecology can require a facility to develop best management plans to prevent this accidental release [section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080].

The proposed permit requires this facility to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

G. Slug Discharge Plan

Ecology determined that the Sierra Pacific Industries has the potential for a batch discharge or a spill that could adversely affect the treatment plant therefore the proposed permit requires a slug discharge control plan (40 CFR 403.8 (f)).

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H. General Conditions

Ecology bases the standardized General Conditions on state and federal law and regulations. They are included in all State Waste Discharge permits issued by Ecology.

VI. PUBLIC NOTIFICATION OF NONCOMPLIANCE

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. PERMIT ISSUANCE PROCEDURES

A. Permit Modifications

Ecology may modify this permit to comply with new or amended state or federal regulations.

B. Proposed Permit Issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for five years.

VIII. REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information
(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

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Appendices

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to issue a permit to (insert the facility name). The permit prescribes operating conditions and wastewater discharge limits. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology placed a Public Notice of Application on October 9, 2008, and October 16, 2008, in *Daily Chronicle* to inform the public about the submitted application and to invite comment on the issuance of this permit.

Ecology will place a Public Notice on January 5, 2009, in the *Daily Chronicle* to inform the public and to invite comment on the proposed issuance of this State Waste Discharge permit as drafted.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Asks people to tell us how well the proposed permit would protect the receiving water.
- Invites people to suggest fairer conditions, limits, and requirements for the permit.
- Invites comments on Ecology's determination of compliance with antidegradation rules.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed State Waste Discharge Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, 360-407-6280, or by writing to the permit writer at the address listed below.

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, Washington 98504-7775

The primary author of this permit and fact sheet is Aziz Mahar, P.E.

APPENDIX B--GLOSSARY

AKART--The acronym for “all known, available, and reasonable methods of prevention, control and treatment.” AKART is a technology-based approach to limiting pollutants from wastewater discharges which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate Point of Compliance--An alternative location in the ground water from the point of compliance where compliance with the ground water standards is measured. It may be established in the ground water at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An “early warning value” must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual Average Design Flow (AADF) --The average of the daily flow volumes anticipated to occur over a calendar year.

Average Monthly Discharge Limit--The average of the measured values obtained over a calendar month's time.

Background water quality--The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of ground water at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95 percent upper tolerance interval with a 95 percent confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

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Bypass--The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards--National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring--Uninterrupted, unless otherwise noted in the permit.

Distribution Uniformity--The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early Warning Value--The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, ground water, surface water, the vadose zone or within the treatment process. This value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit--The concentration assigned to a contaminant in the ground water at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a ground water criterion will not be exceeded and that background water quality will be protected.

Engineering Report--A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Ground water--Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

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Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User--A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference--A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits--Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limit--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Maximum Day Design Flow (MDDF)--The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum Month Design Flow (MMDF)--The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum Week Design Flow (MWDF)--The largest volume of flow anticipated to occur during a continuous 7 day period, expressed as a daily average.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

pH--The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7.0 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

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Pass-through--A discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Peak Hour Design Flow (PHDF)--The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak Instantaneous Design Flow (PIDF)--The maximum anticipated instantaneous flow.

Point of Compliance--The location in the ground water where the enforcement limit shall not be exceeded and a facility must be in compliance with the Ground Water Quality Standards. It is determined on a site specific basis and approved or designated by Ecology. It should be located in the ground water as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless an alternative point of compliance is approved.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL) --A calculated value five times the MDL (method detection level).

Reasonable Potential--A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process waste stream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

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*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge--Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

Soil Scientist--An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

Solid waste--All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD₅--Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD₅ test is sufficient to remove the particulate organic fraction.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria--A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent pollution of the receiving water.

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APPENDIX C-- RESPONSE TO COMMENTS

Comments were received from Mr. Ken Johnson of Weyerhaeuser. Comments were received by e-mail February 4, 2009.

Comment:

The permit Fact Sheet identifies only two sources of process wastewaters from this facility: a reverse-osmosis concentrate from boiler feedwater conditioning and boiler blowdown. Assuming this is a softwood lumber mill and assuming modern industry lumber kiln drying technologies and temperature/drying cycles, there will likely be significant quantities of a process water generated in the drying activity. As lumber is dried, water is physically “expressed” from the wood. Unless the drying temperatures are sustained at greater than the water boiling point, a low pH/high BOD process water will accumulate in the kilns and must be managed.

Is this a process wastewater anticipated by Sierra Pacific and, if so, how will it be regulated?

Ecology’s Response:

Ecology’s response to Mr. Ken Johnson’s comment is the following. The applicant’s consultant stated that “Water released from the wood escapes as steam into the atmosphere as per the Air Discharge Permit (ADP 08-2799) under jurisdiction of the Southwest Clean Air Agency. No water from the wood moisture will be discharged to the POTW, it is all released to the atmosphere. The only industrial wastewater discharged to the POTW will be RO concentrate and boiler blowdown water as described in the permit application”. The Department of Ecology has authorized the discharge of RO concentrate and boiler blowdown under this permit (Permit ST6220).